

CLAIMS

What is claimed is:

1. An RFID labeling system, comprising:  
an RFID encoder coupled to receive a signal and  
5 program an RFID label based on the signal, wherein  
the signal contains information for programming the  
RFID label; and  
an RFID label applicator adapted to apply the  
programmed RFID label onto an object.  
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2. The system of claim 1, further comprising a host  
computer capable of sending the signal to the RFID  
encoder, wherein the signal is a data stream having a  
first programming language and comprising instructions  
15 for printing an image on an optically readable label.
3. The system of claim 1, further comprising an  
optical label reader capable of sending the signal to the  
RFID encoder, wherein the signal comprises data read from  
20 an optically readable label.
4. The system of claim 1, wherein the RFID encoder  
verifies that information contained in an optically  
readable label matches data programmed on the RFID label.  
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5. The system of claim 2, wherein the RFID encoder  
is capable of extracting information from data streams of  
different programming languages.
- 30 6. The system of claim 2, further comprising an  
optical label reader adapted to receive the data stream  
for verifying that the optically readable label has been  
properly printed.

7. The system of claim 2, wherein the optically readable label is a barcode label.

8. The system of claim 3, wherein the optically  
5 readable label is a barcode label.

9. The system of claim 1, wherein the object is a container.

10 10. The system of claim 6, wherein properly printed comprises the optically readable label being readable and printed with the information corresponding to the data stream.

15 11. The system of claim 6, wherein the optical label reader is coupled to the RFID encoder for receiving the data stream.

12. The system of claim 2, further comprising an  
20 optically readable label printer and applicator coupled to the host computer and adapted to receive the data stream.

13. The system of claim 12, further comprising a  
25 conveyer system for moving the package past the optically readable label printer and applicator and the RFID encoder.

14. The system of claim 12, wherein the optically  
30 readable label printer and applicator applies the optically readable label to the package prior to the object passing by the RFID encoder.

15. A method for applying an RFID label onto a package containing an optically readable label, the method comprising:

5       receiving a signal comprising RFID programming information;  
          programming the RFID label using the RFID programming information; and  
          applying the RFID label onto an object.

10       16. The method of claim 15, wherein the signal is a data stream in a programming language, transmitted from a host computer.

15       17. The method of claim 15, wherein the signal is read from a corresponding optically readable label.

18. The method of claim 17, wherein the optically readable label is a barcode label.

20       19. The method of claim 15, wherein the receiving is from a host computer and the signal is a data stream in a programming language, the method further comprising

          determining whether the optically readable label has been properly printed;  
25       determining whether the RFID label has been properly programmed; and  
          applying the RFID label to the object if the optically readable label has been properly printed and the RFID label has been properly programmed.

30       20. The method of claim 19, further comprising programming the RFID label using commands from the data stream.

21. The method of claim 19, wherein commands in the data stream are also used to print the optically readable label.

5        22. The method of claim 19, wherein the information for determining whether the RFID label has been properly programmed is extracted from data streams of different programming languages.

10       23. The method of claim 19, wherein determining whether the RFID label has been properly programmed comprises comparing data on the optically readable label with data encoded in the RFID label.

15       24. The method of claim 19, wherein determining whether the optically readable label has been properly printed comprises determining whether the optically readable label is readable.

20       25. The method of claim 19, wherein determining whether the optically readable label has been properly printed comprises determining whether the optically readable label contains information from the data stream.

25       26. The method of claim 19, wherein determining whether the optically readable label has been properly printed comprises scanning the optically readable label.

30       27. A method of applying labels to packages,  
comprising:

printing an optically readable label based on information contained in a data stream from a host computer;

applying the optically readable label onto a package;

5 verifying whether an RFID label has been properly programmed based on information contained in the data stream or in the optically readable label; and

applying the RFID label to a package if the RFID label has been properly programmed.

10 28. The method of claim 27, further comprising determining whether the optically readable label was printed properly.

15 29. The method of claim 27, further comprising writing to the RFID label using information from the data stream or the optically readable label before the verifying.

20 30. The method of claim 27, further comprising comparing the content of the optically readable label with the content of the RFID label.

25 31. The method of claim 28, wherein the determining comprises scanning the optically readable label.

32. The method of claim 28, wherein the determining comprises using information contained in the data stream.

30 33. The method of claim 27, wherein the data stream can be of different programming languages.